

What is claimed is:

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1. A method of manufacturing a flat panel display,
comprising:

5 depositing a getter film on a faceplate having a phosphor
layer formed on a substrate; and

disposing the faceplate thereon the getter film is
deposited and a rear plate having an electron source formed on
a substrate so as to face to each other to form a gap therebetween,
and hermetically sealing the gap.

10 2. The method of manufacturing the flat panel display as
set forth in claim 1:

wherein the getter film is one made of evaporable getter
material.

15 3. The method of manufacturing the flat panel display as
set forth in claim 1:

wherein the getter film is substantially made of Ba.

4. The method of manufacturing the flat panel display as
set forth in claim 1:

20 wherein the faceplate comprises a metal back formed on the
phosphor layer.

5. The method of manufacturing the flat panel display as
set forth in claim 1, further comprising:

preceding depositing the getter film, heating/deaerating
the faceplate.

25 6. The method of manufacturing the flat panel display as
set forth in claim 1, further comprising:

preceding hermetically sealing, heating/deaerating the
rear plate.

7. The method of manufacturing the flat panel display as set forth in claim 1:

wherein the respective processes are implemented in a vacuum atmosphere.

5 8. The method of manufacturing the flat panel display as set forth in claim 1:

wherein the respective processes are implemented in a same manufacturing apparatus continuously or simultaneously.

10 9. The method of manufacturing the flat panel display as set forth in claim 1:

wherein the respective processes are implemented in manufacturing apparatuses independent for the respective processes continuously or simultaneously.

15 10. The method of manufacturing the flat panel display as set forth in claim 9:

wherein as the manufacturing apparatuses independent for the respective processes, the apparatuses in which the respective processes are arranged not to expose the faceplate and the rear plate to an oxidizing atmosphere are employed.

20 11. The method of manufacturing the flat panel display as set forth in claim 4:

wherein the getter film substantially made of Ba is formed by vapor depositing Ba on the metal back of the faceplate in a vacuum atmosphere.

25 12. The method of manufacturing the flat panel display as set forth in claim 1:

wherein the getter film is deposited on at least a part of an image display region of the faceplate.

13. The method of manufacturing the flat panel display as set forth in claim 1:

wherein the getter film is deposited mainly in a region other than a region where the phosphor layer is formed.

5 14. The method of manufacturing the flat panel display as set forth in claim 1:

wherein the getter film has a thickness of 1 μm or more.

15. The method of manufacturing the flat panel display as set forth in claim 1:

10 wherein in the hermetic sealing, a support frame is disposed between the faceplate and the rear plate, the gap being hermetically sealed through the support frame.

16. The method of manufacturing the flat panel display as set forth in claim 15:

15 wherein the support frame and the faceplate are hermetically sealed by means of indium or alloy thereof.

17. The method of manufacturing the flat panel display as set forth in claim 7:

20 wherein the region between the faceplate and the rear plate is made a vacuum of 1×10^{-5} Pa or better by means of a vacuum atmosphere during the process and the getter film.

18. The method of manufacturing the flat panel display as set forth in claim 1:

25 wherein the respective processes are implemented in a vacuum atmosphere of 1×10^{-4} Pa or better.

19. A flat panel display, comprising:

a faceplate having a phosphor layer and a metal back formed on a substrate;

a getter film substantially made of Ba deposited on the metal back; and

a rear plate disposed facing the faceplate to form a gap therebetween and having an electron source;

5 wherein the gap between the faceplate and the rear plate is hermetically sealed.

20. The flat panel display as set forth in claim 19:

wherein the getter film is deposited on at least a part of an image display region of the faceplate.

10 21. The flat panel display as set forth in claim 19:

wherein the getter film is deposited mainly in a region other than a region where the phosphor layer is formed on the metal back.

22. The flat panel display as set forth in claim 19:

15 wherein the getter film has a thickness of 1 μm or more.

23. The flat panel display as set forth in claim 19, further comprising:

a support frame disposed between the faceplate and the rear plate;

20 wherein the gap between the faceplate and the rear plate is hermetically sealed through the support frame.

24. The flat panel display as set forth in claim 23:

wherein the support frame and the faceplate are hermetically sealed by means of indium or alloy thereof.

25 25. The flat panel display as set forth in claim 19:

wherein a region between the faceplate and the rear plate is evacuated to a vacuum of 1×10^{-5} Pa or better.

26. A flat panel display, manufactured at least by

depositing a getter film on a faceplate having a phosphor layer formed on a substrate, and by disposing the faceplate thereon the getter film is deposited so as to face a rear plate having an electron source formed on a substrate with a gap therebetween to hermetically seal.

27. The flat panel display as set forth in claim 26: wherein the getter film is one formed of evaporable getter material.

28. The flat panel display as set forth in claim 26: wherein the getter film is substantially made of Ba.

29. The flat panel display as set forth in claim 26: wherein the faceplate comprises a metal back formed on the phosphor layer.

30. The flat panel display as set forth in claim 26: wherein, preceding the deposition of the getter film, heating/deaerating of the faceplate is implemented.

31. The flat panel display as set forth in claim 26: wherein the getter film is deposited on at least a part of an image display region of the faceplate.

32. The flat panel display as set forth in claim 26: wherein the getter film is deposited mainly in a region other than a formation region of the phosphor layer.

33. The flat panel display as set forth in claim 26: wherein the getter film has a thickness of 1 μm or more.

34. The flat panel display as set forth in claim 26: wherein the hermetic sealing is one in which through a support frame disposed between the faceplate and the rear plate the gap is hermetically sealed.

35. The flat panel display as set forth in claim 34:
wherein the support frame and the faceplate are
hermetically sealed by means of indium or alloy thereof.

36. The flat panel display as set forth in claim 26:
5 wherein a region between the faceplate and the rear plate
is evacuated to a vacuum of 1×10^{-5} Pa or better.

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